# Peak Performance

# **Understanding LDL Cholesterol**

In the April 2007 edition of **Peak Performance** lipid values were discussed in general with treatment guidelines outlined based on individual risk factors for coronary heart disease. In this issue we are providing specific treatment guidelines for your "bad" cholesterol or your LDL. Remember that the normal range for your LDL cholesterol is generally thought to be 70-130mg/dl or less with the lower the number the better. Remember too, that those patients with little risk for cardiovascular disease can accept values closer to 130-mg/dl without overly increasing your risk.



In a recent study provided by the American Heart Association's "Get With the Guidelines" program indicated fully half of U.S. patients hospitalized for coronary heart disease have an LDL cholesterol of 100-mg/dl or <u>less</u>. The new data shows that LDL levels above 130-mg/dl are not the chief concern. Less than one quarter of the 136,905 patients hospitalized for coronary artery disease (CAD) during January 2000-April 2006 at 541 U.S. hospitals participating in the study had an LDL value in excess of 130-mg/dl. In addition, fewer than 8% had an HDL value greater than 60-mg/dl. Also reported in the study was that

only 1.4% of those patients admitted had the "ideal" lipid profile of an LDL below 70-mg/dl **and** an HDL level greater than 60-mg/dl. These data strengthen the support for the recent National Cholesterol Education Program guideline setting an optimal more aggressive LDL target of under 70-mg/dl.

Of those patients admitted for CAD, 79% had an acute coronary syndrome (ACS). Only 21% of the total patient population were on lipid-lowering therapy prior to admission. The mean age of the patients was 65 years: 80% were white, 32% were diabetic, 33% were smokers, 20% had a prior heart attack. A relatively high risk group.

We often hear messages that physicians are not getting patients LDL values to target. This study indicates that physicians are getting values to target but the target LDL value of 100-mg/dl is not adequate enough to guarantee a high level of cardiovascular protection because half of patients with ACS had LDL values below 100-mg/dl.

Many patients in this study had LDL values below 100mg/dl but they also had low HDL values (<40-mg/dl) suggesting the importance of combining LDL-*lowering* strategies with HDL-*raising* strategies as a method of better prevention. A number of smaller studies are demonstrating that combining niacin and statin drugs such as Lipitor and Zocor have the greatest relative risk reduction.

The key lesson provided by the "Get With the Guidelines" database is that it takes more factors than an LDL of less than 100-mg/dl to prevent coronary events. Make sure to discuss this with your primary care physician when addressing risk factors for CHD and lipid lowering strategies.

Target value for your LDL: 2 or more risk factors including Family History <70-mg/dl Target value for your HDL: 2 or more risk factors including Family History >60-mg/dl

Visit the American Heart Associations web site at <a href="www.americanheart.org">www.americanheart.org</a>. and the National Heart Lung and Blood Institute web site at <a href="www.nhlbi.nih.gov">www.nhlbi.nih.gov</a> for more information on lipid lower guidelines and strategies.

## Making the Most of Your Health Care Benefits-

NRS 615.455-457 clearly states that police officers and firefighters are responsible for correcting pre-disposing risk factors for heart and lung diseases identified during your annual heart lung examination. NRS 617.455-457, Sub 6 states that failure to do so will exclude the employee from these benefits. Often times, officers and firefighters are given specific instructions to correct pre-disposing risk factors but are uncertain of how best to do this. Employees who qualify for benefits under the police/fire category may not be aware of resources available under the State of Nevada health insurance plans. Individuals with predisposing conditions such as smoking, diabetes, hypertension, obesity and elevated lipids are encouraged to utilize the preventative care services offered under their policy. Below is an *outline* of each of the health insurances plans offered by the State of Nevada. Remember, to check with your individual provider for specific programs you may qualify for. And remember too, to follow your risk factors carefully with your primary care physician.

**PPO** - Under the annual Wellness Program the plan year maximum benefit is \$2,500.00. There is **NO** deductible and **NO** co-pay if you use in-network providers. Examples of services that are covered under your Wellness Benefit include smoking cessation, weight loss programs, diabetes screening and follow-up lab tests, hypertension screening, routine physicals and lab tests.

<u>HPN</u> - Offers a wide variety of classes and programs through its certified health education specialists, registered dietitians, and diabetes educators. Other programs offered help patients cope with chronic conditions such as diabetes, high blood pressure, obesity and elevated lipids. Wellness classes also include smoking cessation and weight management.

<u>ANTHEM</u>- Has numerous health education and prevention programs available through your primary care provider or on line. Programs include smoking cessation, weight loss and diabetes education. Some members may qualify for discounts for programs such as Jenny Craig and discounts on fitness equipment.

Take advantage of these programs. It's an easy way to track and aggressively address risk factors-!!

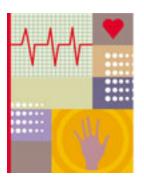
## Changes in reporting obesity -

Of all the risk factors identified during your annual physical the one that seems to create the most argument and controversy is the reporting of your body mass index (BMI) and the documentation of obesity. Body fat distribution is a significant predictor of health risk associated with heart disease, diabetes, hypertension, and stroke. Individuals with more fat on the trunk, especially abdominal fat, are at significant risk for these conditions. BMI is used to correlate obesity by measuring your body weight in kilograms divided by your height in meters squared. This calculation however, can be skewed especially if individuals have a high volume of muscle mass or have abnormally large frame sizes. In an effort to make the measurement of obesity more accurate and user friendly beginning **September 1**, **2007** the clinicians performing your annual physicals will also be reporting obesity as it relates to your waist circumference.

Waist circumference can be used alone to assess body fat because abdominal obesity is the issue. This is also an easy way for those individuals that are interested in tracking weight loss progress to have a easy tool to use at home. The measurement is typically made around the waist at the height of the umbilicus. The guideline that will be used to correlate your risk for obesity related health issues will be:

<u>Men</u> - Waist circumference greater than or equal to 40 inches or 102 cm. <u>Women</u> - Waist circumference greater than or equal to 35 inches or 89 cm.

These guidelines are well defined by the **National Institute of Health** and the **National Heart Lung and Blood Institute**. For more information log on to their website at the address listed on Page 1.



#### Fitness Made Fun - Heart Rate Monitors-

Heart rate monitors (HRMs) are a fun way to monitor your exercise sessions. Whether you are a competitive athlete, hiker, cyclist, runner or simply enjoy recreational fitness activities these small electronic devices provide a wealth of information at your fingertips. These are small wrist mounted information stations that can make achieving fitness goals fun and help guide you to optimal performance. Heart rate monitors use personal data such as age, weight and resting heart rate to calculate aerobic target heart rate zones and help you maintain your optimal training level during exercise. They offer you immediate feedback so you can evaluate your performance allowing you to adjust your training level accordingly. Most heart rate monitors require a separate, wireless chest strap to monitor your heart much like an

EKG. Most have stop watches, timers and target heart rate zones to help you maintain the proper intensity while exercising or enjoying recreational activities like hiking. Some also have calorie counters, altimeters, GPS sensors and PC interfaces allowing you to download training information to your desktop computer for storage and comparison. Sophisticated models can even be adapted to mount on your bicycle to track pedaling cadence and speed. HRMs are a great motivational tool. Give one a try to kick start your exercise program.

For questions regarding HRMs send a note to Josh Wilson @ wilson\_jr@willis.com or Jim Muth @ jmuth@kbomanmd.com They will be glad to help you identify your target training zone and incorporate the data obtained from your annual physical into your training program.

# **Quick Tips -**

Twenty percent of your daily fluid needs should come from the food you eat. During the warm summer months, load up on juicy fruits and watery vegetables such as peaches, watermelon, zucchini, and tomatoes to help you meet nutrition and hydration needs.





Omega-3 Fatty acids are polyunsaturated (good) fats found in cold water fish like salmon, mackerel and halibut and plant sources such as walnuts, soybeans and flaxseeds. Omega-3's improves heart health by lowering triglyceride levels and may help reduce plaque build-up in arteries. The American Heart Association recommends all adults eat 2 servings of fatty fish each week. Those of you with higher risk of heart disease may want to add a daily fish-oil supplement to your diet. They are readily available over-the-counter.





Swap in Dark Beer and swap out Light Beer. Darker brews typically have fewer calories per bottle than lighter version, but in general they have far more antioxidants from the wheat and grains used to make them. Limit your consumption to one or two servings per occasion.

#### EMPLOYEE RECOGNITION- MET Values

Shaun Martin - NHP - 24.3 Steve Brittingham - NDF - 21.1 Paul Hearne - DOW - 21.1 Charles "Chuck" Fox - NDF - 20.4 Terry Houston - NHP - 20.4 Greg Armstrong - P&P - 19.8 William Dean - DOC - 18.8 Arlen Hirsch - NDF - 18.8 Joe Livreri - NDF - 18.8 Kevin Tice - P&P - 18.4 William Steward - NDF - 17.9 Eloy Abeyta - P&P - 17.8 Mike Dantonio - P&P - 17.8 Duane Dory - NDF - 17.8 Damien Gusmerotti - NDF - 17.8 Andrew Rasor - NDI - 17.4 Annika Gonzales - NDF - 17.0 Mike Hurley - DMV - 17.0 Susan Jackson - NHP - 17.0 Thom Jackson - NHP - 17.0 Joel Johnson - NDF - 17.0 Tom Little - NDF - 17.0 Shawn Lytle - NDF - 17.0 Adam Page - P&P - 17.0 Bruce Strooud - DOC - 17.0 Scott Stuenkel - NHP - 17.0 Karen Welden - DOW - 17.0 Raul Arroyo - NDF - 17.0 Jerome Gerrard - NDI - 16.9 Jorge Gonzalez - NDF - 16.9 James Hunt - NDF - 16.9 Karl Lackinger - NDF - 16.9 Ken Leon - P&P - 16.9 Tommy Lewis - NDF - 16.9 Chris Moore - P&P - 16.9

Johnny Peoples - NHP - 16.9 Mike Pirtle - DMV - 16.9 Ervin Raab - NHP - 16.9 Darren Reimer - NHP - 16.9 Dennis Walker - NDF - 16.9 Tim Woolever - NDF - 16.9 Kevin Allison - DOC - 16.8 Brett Bogden - NHP - 16.8 Anthony Crisp - NHP - 16.8 Paul Dankowski - DOW - 16.8 Chris Faehling - NDF - 16.8 Emeterio Florez - P&P - 16.8 Jean Gagnon - NDI - 16.8 Jesse Howard - NDF - 16.8 Thomas Johnson - NHP - 16.8 Johnny Jones - NDF - 16.8 Eric Kemmer - NHP - 16.8 William Lloyd - DOC - 16.8 Randy Lecetti - DOW - 16.8 Daniel Morgan - NDF - 16.8 Peter Onorato - 16.8 Daniel Rangel - NDF - 16.8 Brenda Shores - DOW - 16.8 Russell Steere - DOC - 16.8 Mike Timm - NHP - 16.8 William Unangco - P&P - 16.8 Laurie Vela - P&P - 16.8 Felix Villas - NHP - 16.8 Levi Winward - DOW - 16.8 Deb Worthington - P&P - 16.8 Ken Wright - P&P - 16.8 Mike Almarez - P&P - 16.7 Peyton Callan - NDF - 16.3 Jeffrey Figueiredo - NDI - 16.3

Scott JAckson - NHP - 16.3

#### EMPLOYEES MAKNG SIGNIFICANT HEALTH IMPROVEMENTS:

Steven Clark - DOC Anthony Crisp - NHP Franklin Dickens - DOC Pamela Feil - DOC Paul Harris - P&P Shirley Joseph - DOC Jeff Jourdan - NHP Gerrid Pope - NDF George Thaw - NHP

Tyson Nelson - NDF - 16.9

Those of you who read "Peak Performance" regularly may notice a slight change to the format and layout of the publication. We will continue to keep you informed on topics ranging from the Heart Lung Program, to diet, exercise and nutritional advise. We encourage you to drop the Risk Management Division a note at 201 S. Roop St, Ste 201, Carson City, NV 89701, or call Vicky fry, RN, 775.687.3194. We are always looking for guest contributors to relate personal accomplishments and success stories. You can also drop a note or e-mail to Vicky Fry, RN: vfry@risk.state.nv.us, Josh Wilson @ wilson\_jr@willis.com or Jim Muth @ jmuth@kbomanmd.com. Either of them will be happy to answer questions and provide information on wellness and a heart healthy lifestyle.